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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Huiping Li

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EXAMINER

BRIER, JEFFERY A

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/935,610	<b>Applicant(s)</b> LI ET AL.	
	<b>Examiner</b> Jeffery A. Brier	<b>Art Unit</b> 2628	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/24/2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/29/2007 has been entered.

***Response to Amendment***

2. The amendment filed on 5/29/2007 has been entered. The amendments to the claims overcomes both the Chun reference and the Anatani reference. The remaining issues to be resolved are 35 USC 112 second paragraph and 35 USC 101 issues.

***Response to Arguments***

3. Applicant's arguments filed 5/29/2007 concerning the 35 USC 101 non-statutory rejection with regard to preemption have been fully considered but they are not persuasive because the specification defines "video" as any image sequence from any observer or any computer-generated image sequence in paragraph [0018] and the specification defines the overlay as any overlay since textual and graphic overlays are all substantial overlays in view of paragraphs [0002]-[0008] and the specification defines "video processing" as any processing in paragraph [0019]. Thus, in view of the

specification's definitions the claimed overlay is any overlay, the claimed video is any image sequence, and the claimed text-graphic is any overlay.

### ***Drawings***

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

227 and 228 referenced in paragraph [0040] are not present in the drawings, see figure 6, and

229 referenced in paragraph [0041] is not present in the drawings, see figure 6.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to because:

In figure 5 steps 2114 and 2115 "C" should be "C<sub>1</sub>" see paragraphs [0047] and [0048] as well as figure 4 steps 212 and 215.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

6. The disclosure is objected to because of the following informalities: in paragraph [0048] "C1" should be "C<sub>1</sub>", see paragraph [0047] as well as figure 4 steps 212 and 215.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-3, 22-27:

Independent claim 1 claims graphics only or text-graphics but does not claim how the detecting detects the overlay and it is not clear if applicants template matching is only being claimed or also claims the wavelet embodiment since the claimed "graphics only" (in view of logos) overlay and "text-graphic" overlay covers overlays extracted in the template matching embodiments and the wavelet embodiment.

Independent claim 1 claims "graphics only or text-graphics" and the claim terms "graphics only" and "text-graphic" are unclear since with regards to "graphics only" a graphic logo overlay may have text and with regards to "text-graphics" the specification does not define this term and paragraph [0062] does not clarify this term.

Thus, independent claim 1 is unclear as to whether these claims are "extracting only a pre-existing static graphics overlay" and by the method used in the extraction.

The dependent claims do not clarify these issues.

Claims 4-21 and 29-34:

Independent claims 4, 29, and 31 are unclear as to whether these claims are extracting textual overlays and unclear if they are “extracting only a pre-existing static textual overlay” since the specification only describes wavelets as being used in the extraction of “a pre-existing static textual overlay” while the claimed overlay includes both described textual and graphic overlays. The dependent claims do not clarify these issues.

Claims 35-38:

Independent claim 35 claims “graphics only or text-graphics” and the claim terms “graphics only” and “text-graphics” are unclear since with regards to “graphics only” a graphic logo overlay may have text and with regards to “text-graphics” the specification does not define this term and paragraph [0062] does not clarify this term. Thus, independent claim 35 is unclear as to whether these claims are “extracting only a pre-existing static graphics overlay”.

The dependent claims do not clarify these issues.

***Claim Rejections - 35 USC § 101***

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claims 1-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims preempt all substantial uses of

the mathematical equation used in the detection and verification of overlay in order to extract the overlay from a video because the specification defines "video" as any image sequence from any observer or computer-generated any image sequence in paragraph [0018] and the specification defines the overlay as any overlay since textual and graphic overlays are all substantial overlays in view of paragraphs [0002]-[0008] and the specification defines "video processing" as any processing in paragraph [0019]. Thus, in view of the specification's definitions the claimed overlay is any overlay, the claimed video is any image sequence, and the claimed text-graphic is any overlay. Therefore the claims preempt all substantial uses of the mathematical equation used in the detection and verification of overlay in order to extract the overlay from a video.

The term "video" is defined in paragraph 0018 as:

[0018] "Video" refers to motion pictures represented in analog and/or digital form. Examples of video include television, movies, image sequences from a camera or other observer, and computer-generated image sequences. These can be obtained from, for example, a live feed, a storage device, a firewire interface, a video digitizer, a computer graphics engine, or a network connection.

The term "video processing" is defined in paragraph 0019 as:

[0019] "Video processing" refers to any manipulation of video, including, for example, compression and editing.

Refer to the Interim Guidelines for Examination of Patent Applications for Patent

Subject Matter Eligibility at page 23. Page 23 of the Guidelines discusses:

Even when a claim applies a mathematical formula, for example, as part of a seemingly patentable process, the examiner must ensure that it does not in reality "seek[] patent protection for that formula in the abstract." Diehr, 450 U.S. at 191, 209 USPQ at 10. "Phenomena of nature, though just discovered, mental processes, abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological



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work.” Benson, 409 U.S. at 67, 175 USPQ at 675. One may not patent a process that comprises every “substantial practical application” of an abstract idea, because such a patent “in practical effect would be a patent on the [abstract idea] itself.” Benson, 409 U.S. at 71-72, 175 USPQ at 676; cf. Diehr, 450 U.S. at 187, 209 USPQ at 8 (stressing that the patent applicants in that case did “not seek to pre-empt the use of [an] equation,” but instead sought only to “foreclose from others the use of that equation in conjunction with all of the other steps in their claimed process”). “To hold otherwise would allow a competent draftsman to evade the recognized limitations on the type of subject matter eligible for patent protection.” Diehr, 450 U.S. at 192, 209 USPQ at 10. Thus, a claim that recites a computer that solely calculates a mathematical formula (see Benson) or a computer disk that solely stores a mathematical formula is not directed to the type of subject matter eligible for patent protection.

Thus, the claims when read in light of the specification preempt all substantial uses of the computer program, the software, and the mathematical formula forming applicants invention.

Applicant should note that amendments to the specification, such as deletion, may introduce new matter into the specification. Thus, an appropriate amendment to the claims is necessary to make the claims statutory.

Claim 26:

This claim is additionally nonstatutory in view the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility published on the USPTO website on October 26, 2005,

[http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf)

and published in the OG 22Nov2005

<http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>) because they claim a computer readable medium which in view of the specification is a carrier wave.

The term "computer-readable medium" is defined in paragraph 0014 as:

[0014] A "computer-readable medium" refers to any storage device used for storing data accessible by a computer. Examples of a computer-readable medium include: a magnetic hard disk; a floppy disk; an optical disk, like a CD-ROM or a DVD; a magnetic tape; a memory chip; and a carrier wave used to carry computer-readable electronic data, such as those used in transmitting and receiving e-mail or in accessing a network.

These claims claim carrier wave signals as a computer readable medium because applicants paragraph 0014 defines computer readable medium as carrier wave. Claim 26 claims a carrier wave for causing a computer to implement the method of claim 1 even in light of the addition of the limitation "wherein the computer-readable medium is a manufacture" to claim 26 because applicants specification does not define the term "manufacture". In ANNEX IV Computer-Related Nonstatutory Subject Matter of the Interim guidelines a signal is held to be nonstatutory subject matter and since applicants carrier wave is a signal then these claims are nonstatutory.

Applicant should note that amendments to the specification, such as deletion, may introduce new matter into the specification. Thus, an appropriate amendment to the claims is necessary to make the claims statutory.

11. A proper prior art analysis of the claims cannot be made because the metes and bounds of the claims are not definite and because the specification does not clarify the claims. Thus, a prior art rejection or an indication of allowability cannot be made with the currently pending claims. In re Steele, 305 F.2d 859, 134 USPQ 292 (CCPA 1962)

(it is improper to rely on speculative assumptions regarding the meaning of a claim and then base a rejection under 35 U.S.C. 103 on these assumptions). However, if the 35 USC 112 and 101 issues are resolved the claims would no longer cover general purpose textual overlay extraction or graphical overlay extraction or both.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-7656. The examiner can normally be reached on M-F from 7:30 to 4:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jeffery A. Brier/  
Primary Examiner, Division 2628